ಬೆವಿಕಂ
BESCOM

ಬೆಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ ನಿಯಮಿತ

Bangalore Electricity Supply Company Limited

(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಂಪೂರ್ಣ ಸ್ವಾಮ್ಯಕ್ಕೆ ಒಳಪಟ್ಟಿದೆ)

No. : BESCOM/CGM(P)/DGM(P)/AGM(P3)/BC-10/2025-26/10092

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ಸ್ವಾತಂತ್ರ್ಯದ ಅಮೃತ ಮಹೋತ್ಸವ

O/o Chief General Manager (Ele.,),
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Date: 02 MAR 2026

AMENDMENT / CLARIFICATIONS

Sub: Procurement of Sheet Metal LT AC Distribution Boxes For 100KVA AND 250kVA Transformer Centers for North Zone of BMAZ Area, BESCOM as per tender specification – Reg.

Ref:
1. Tender Enquiry No: BESCOM/2025-26/IND0191
2. Queries received from the prospective Bidders.
3. Pre bid meeting held on 06.02.2026.
4. Note sheet approved by Managing Director, BESCOM dated: 01.03.2026.

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Tender has been invited for Procurement of Sheet Metal LT AC Distribution Boxes For 100KVA AND 250kVA Transformer Centers for North Zone of BMAZ Area, BESCOM as per tender specification vide reference (1).

With respect to this tender enquiry, prospective Bidders have sent queries through letters seeking clarification/ amendments. These queries had been discussed in the pre-bid meeting held on 06.02.2026.

Consequent to decision of pre bid meeting & as per the approval in reference (4), following amendment/ Clarifications are issued for the above said enquiry cited under ref (1).

Sl.No	Clause No.	As Existing	As Requested	Clarifications/ Amendments to be issued
1	Clause 2(4) & Clause 5	"Single door Hydraulic Type bottom open" Design & Construction), Door shall be automatically closed without applying external force.	We request you to provide the clarification that in case hydraulic type bottom open single door is provided then external force is required to counter the door hydraulic system to close the door.	Metal Enclosure shall have single door with "Auto lift gas spring of Minimum 250N force and suitable stroke length" to be provided for Hydraulic opening and closing system of door. This design prevents accidental open doors enhances safety (vermin) dust entry prevention and align with operational needs.

Sl.No	Clause No.	As Existing	As Requested	Clarifications/ Amendments to be issued
2	Clause 3	IS 13947 has been discontinued and replaced with IS 60947.	We request you to provide clarification on above.	IS/IEC 60974 is also mentioned in the specification which is inline with IS-13947
		IS 104 is not applicable for powder coating		The mentioned IS in the specification is for brusing, croming and finishing. For powder coating applicable IS- 13871 and its amendments shall be consider.
		IS 117 is not applicable for Powder Coating		
		IS 8828:1996 is discontinued and replaced by 60898. Moreover, this is not applicable for the MCCB to be used in distribution box.		For MCCB IS/IEC -60947 (1 &2) mentioned in the specification shall be consider. IS-8828:1996 which is replaced by 60898 may consider wherever applicable in the testing method.
3	Clause 4 (h)	Required Degree of Protection is IP 54.	This may kindly be noted that when ventilating louvers with perforated sheet weld mesh will be provided on the side wall of the box then maximum Degree of Protection can be IP 43 or IP 33. In case of IP 43 perforated sheet/wire mesh shall have holes of 1mm that has chances of getting blocked by dust over a period of time. In case of IP 33, perforated sheet shall have holes of 2.5 mm without posing any risk of holes getting blocked by dust. So IP33 is preferred. Clarification is required for degree of protection.	The Tender condition prevails. Degree of protection IP -54 requirement with air vent closed
			Also clarify that whether perforated sheet is to be used or wire mesh has to be used inside the ventilation louvers.	Perforated sheet shall be used.

Sl.No	Clause No.	As Existing	As Requested	Clarifications/ Amendments to be issued
4	Clause 5	The single door shall be provided with hydraulic operated mechanism front-opening from bottom side. The hydraulic mechanism shall be Smooth opening and controlled closing. The door shall have minimum 2 Nos of pad locks/ spring loaded key system. The Hinges shall be made out of 3mm thickness plate 50mm length and 4mm dia SS pins with riveted arrangements at top of the distribution box for easy swinging and minimum 2 Nos of hinges shall be provided.	Please clarify hydraulic operated mechanism.	Auto lift gas spring of Minimum 250N force and suitable stroke length (as classified in point 1)
			Please clarify spring loaded key system.	Provide spring loaded locking mechanism which is self explanatory
			Hinge arrangement design given in the specification is not workable. 50mm size of Hinge is very small and riveting of hinges is not at all advisable. Hinges should be welded only. It is suggested that Pin-Bush Type Hinges duly welded on box shall be provided on the distribution box. Please clarify.	Welded hinges (Pin - bush type may be with non removable door type with robust and durable) are acceptable. 50mm is indicative size ensure structural integrity. Bidder may be propose welded pin bush hinges complying with specification may be considered
			When ventilation louvers are provided then the distribution box cannot be watertight, dust and vermin proof. Degree of Protection can be defined in terms of IP xx only. Please clarify this.	The Tender condition prevails i.e., Degree of protection IP-54 with air vent closed
			Please clarify that what does "Four Angles" means in Ventilating Louvers.	Angles means "Ventilating Louvers".
5	Clause 5		Drawings as mentioned in the specification are not enclosed. As such there is no clarity on general arrangement of distribution box. Please clarify and provide the copy of general arrangement Drawing.	As per clause No 20 the successful bidder shall submit the drawing duly incorporating the box dimensions and bus bar sizes as mentioned in the Technical specification for approval. Confirmation will be communicated upon approval of GTP & Drawing.

Sl.No	Clause No.	As Existing	As Requested	Clarifications/ Amendments to be issued
6	Clause 6	The Bus bar clearances shall be as per drawing enclosed as Annexure	Please clarify and provide the drawing of bus bar clearance.	The bus bar clearance to be maintained as per standard
			Recommended sizes of bus bars with vertical riser links can be discussed only after receiving the drawing for bus bar and general arrangement. As such any clarification sought on the bus bar shall be allowed after receiving drawings from BESCOM.	
			It is suggested that neutral busbar should have same cross-section as the phase busbar.	The neutral bus bar shall be provided as mentioned in the Clause No.6 of Technical specification.
			Please clarify the provision of terminating the neutral cable and earthing wire (sizes of neutral cable, earthing wire if any).	As Mentioned in the Clause 6.3 Neutral bus shall be provided with provision of terminating Neutral and Earthing connections.
			Please clarify on Busbar and Lead wire connections. (Where lead wire is to be connected with the busbar and what is size of lead wire.)	The Phase and neutral bus bars as per specification shall be used. No lead wire required.
7	Clause 7		Please clarify the criteria or parameters required for approval of MCCB by BESCOM before manufacturing, when MCCB is already type tested.	The MCCB shall be as per specification and type tested at CPRI/ERDA. And BIS CM/L certification shall be marked on MCCB and BIS documents shall be submitted for verification along with type test report for approval. 1 No. Sample of MCCB of each rating shall be submitted to this office during submission of bid. Further, successful bidder shall offer for inspection of 2 Nos. Prototype at their factory premises for approval. The manufacturer shall proceeding for mass production as per Purchase Order only after approval from QS&S BESCOM. (Prototype shall constitute LT distribution box completely assembled with busbar & MCCB).

Sl.No	Clause No.	As Existing	As Requested	Clarifications/ Amendments to be issued
8	Clause 8		We understand that Minimum Operating Current rating means the rated Current of MCCB. But overload release setting current is not provided.	As per Technical specification rated current MCCB for 250KVA shall be used,
			For 250 KVA transformers, minimum operating current rating is mentioned as 250 A, which is not correct. 250 KVA transformers have capacity of around 350A.	
			Material of Casing of MCCB is mentioned as bio-degradable, whereas the material of MCCB is Dough Moulding Compound which is non-degradable. Please clarify the above points on MCCB.	The MCCB shall be Dough Moulding Compound shall be RoHS compliant.
9	TS LTD Metal Box Page 4/ Point No: 8q)	Isolator Base should withstand the breaking capacity of 80kA to extinguish the arc in immediately in MCCBs.	To be removed	As per IEC-60947 Standards
10	TS LTD Metal Box Page 4/ Point No: 9	Be Ambient Compensation shall effective over 0 degree to 55 degree C	Ambient compensation applies to Panel board design	Tender condition prevails
11	TS LTD Metal Box Page 5/ Point No: 10	**TIME CURRENT CHARACTERSTICS**		
	Multiple of normal current setting	Tripping Time	Tripping Time	The MCCB Time Characteristics shall be as per IS/IEC 60947
	1.05	More than 2.5 hrs.	1.05-2.5 Hr	
	1.2	More than 10 minutes & less than 2 hrs.	1.2 - Less than 1 Hr	
	1.3	Less than 30 minutes.	1.3 - Less than 30 Min	

Sl.No	Clause No.	As Existing	As Requested	Clarifications/ Amendments to be issued
	1.4	Less than 10 minutes.	1.4 - Less than 20 Min	The MCCB Time Characteristics shall be as per IS/IEC 60947
	2.5	Less than 1 minutes.	2.5 - Less than 5 Min	
	4	Not less than 2 seconds.	4.0 - Less than 60 Sec	
	6	Less than 5 seconds.	6.0 - Less than 30 Sec	
	12	Instantaneous (less than 40 mili secs.)	12.0 - Less than 40mSec	
12	Technical Specification Page No: 5-Clause 10 Time Current Characteristics	The protective release shall have inverse time. current tripping for over load and instantaneous for short circuit. The LT MCCBs shall have time current characteristics at 50° C	The protective release shall have inverse time current tripping for over load and instantaneous for short circuit. The LT MCCBs shall have time current characteristics at room temperature	Shall be conduct at room temperature. The results shall be evaluated for 50°C service ambient by derating with respect to maximum permissible limits specified in relevant IS/IEC standards.
13	Clause 15.1		Parameters for Short Time Withstand Current Test is not mentioned. This test is for busbar. When design part is given by BESCOM wherein type of MCCB, size of aluminium busbars, purity of aluminium busbar, aluminium vertical risers, and size of bolts, everything is defined in the specification of BESCOM, then Short Time Withstand Current Test is not in the hands of the manufacturer. It will be by default in accordance with the design provided by BESCOM. So BESCOM should either define the MCCB and busbars and bolts OR it should ask for the manufacturer design to pass the Short Time Withstand Current Test. Please clarify.	Short Time Withstand Current Test 26.3kA for 1 second for Main bus & 15.7 kA for 1 seconds for vertical riser links / neutral bus

Sl.No	Clause No.	As Existing	As Requested	Clarifications/ Amendments to be issued
14	clause 15.2		In clause 15.2 (Type Test Certificates): Type Test can be conducted only after receiving the drawings of General arrangement and Busbars and distribution box as per subject mention bid enquiry. Since the distribution box as per subjection mentioned bid enquiry is very specific requirement of BESCOM, for which type test have to be conducted and that will take 45-60 days. As such we request you to allow the bidders to submit the Type test report of LT distribution boxes of same or higher rating supplied to other DISCOMS.	For the submission of bids, the type test reports of LT Distribution box supplied to other DISCOMs of similar design may be accepted subject to verification. However the complete type test reports as per BESCOM specification shall be furnished before supply of materials.
			We request you to allow for an undertaking for type test to be submitted before the start of supplies or payment shall be released on submission of type test reports.	
15			Type Test reports older up to 10 years shall be allowed as per the Guidelines issued by Central Electricity Authority, Ministry of Power for the validity period of Type Tests.	Type Test reports less than 5 years shall be considered
16			Clause 15.4(g) is not relevant with distribution box. Please clarify.	Clause 15.4(g) verification of the fitting of the LTDB which are approved in the GTP & Drawings will be verified during FAT.
17			In clause 15.4(i), Please clarify internal wiring.	As per standard (Aluminium bus bar, PVC insulation, lugs, spreaders etc., are connected/terminated neatly

Sl.No	Clause No.	As Existing	As Requested	Clarifications/ Amendments to be issued
18	Technical Specification Page No: 7-Clause 15.4 Acceptance Test-Point No.A.	Temperature rise test on one sample of each rating. The temperature rise test will be carried out as per the procedure given below: For temperature rise rest, a distribution box with busbar, MCCB and all assembly kept in an enclosure and passing a rated current through the circuit breaker and measuring the temperature rise of various components. This test is carried out in a controlled environment, with the ambient temperature being recorded throughout the period such that the temperature outside the box shall be maintained at 50°C.	The temperature rise test will be carried out as per the procedure given below. For temperature rise test, a distribution box with busbar, MCCB and all assembly kept in an enclosure and passing a rated current through the circuit breaker and measuring the temperature rise of various components. This test is carried out in a controlled environment, with the ambient temperature being recorded throughout the period such that the temperature outside the box shall be maintained at room temperature	Shall be conduct at room temperature. The results shall be evaluated for 50°C service ambient by derating with respect to maximum permissible limits specified in relevant IS/IEC standards.
19	Page No: 7-Clause 15.4 Acceptance Test-Point No.A.		No sample drawing or GA (General Arrangement) drawing is provided in the tender document. If there is any GA drawing or typical layout drawing related to this tender, kindly share the same so that we can design and quote as per the required configuration and site requirements.	As per clause No 20 the successful bidder shall submit the drawing duly incorporating the box dimensions and bus bar sizes as mentioned in the Technical specification for approval. Upon approval. The confirmation will be communicated upon approval of GTP and Drawing.

Sl.No	Clause No.	As Existing	As Requested	Clarifications/ Amendments to be issued
20	Technical Specification . Page No: 8-Clause 16-Guarantee	The manufacturer shall stand guarantee for the materials supplied including MCCB, for a period of 60 months from the date of Supply of LT distribution box or 54 months from the date commissioning of LT distribution box whichever is earlier, for manufacturing defects.	The manufacturer shall stand guarantee for the materials supplied including MCCB, for a period of 60 months from the date of Supply of LT distribution box or 54 months from the date commissioning of LT distribution box whichever is earlier, for manufacturing defects. MCCB OEM shall offer guarantee to BESCOM as per tender terms.	Bidder has to ensure warranty for the material not by OEM
21	Schedule of Requirement		In the tender document, the total quantity of 100/250 kVA DTRs is mentioned 2950pcs; however, the individual quantities of 100 kVA DTRs and 250 kVA DTRs are not clearly specified. Kindly provide the separate quantities (number of 100 kVA units and number of 250 kVA units) so that we can work out.	For 250KVA Distribution Transformers

All other terms & conditions of the Bid Enquiry remain unaltered.

Chief General Manager (Electy.,),
Procurement, BESCOM.

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